

### Remarks/Arguments

In the Office Action dated October 6, 2006, the Examiner withdrew the objections to the drawings; withdrew the objection to the specification; objected to informality in claim 3; withdrew the Section 112, First Paragraph rejections to claims 2, 3, and 15; and withdrew the Section 112, Second Paragraph rejections to claims 3 and 10-13. Furthermore, the Examiner rejected claims 1 and 6-14 under 35 U.S.C. § 103(a) as being obvious over Applicant's "Description of the Related Art" ("DRA") in view of Lee (U.S. Patent 6,564,287); rejected claims 2-3 and 15 under 35 U.S.C. § 103(a) as being obvious over Applicant's DRA in view of Lee as applied to claims 1 and 9 and further in view of Paul et al. ("Paul") (U.S. Patent 6,629,226); and rejected claim 16 under 35 U.S.C. § 103(a) as being obvious over Applicant's DRA in view of Lee applied to claim 9, and further in view of Shinozaki (U.S. Patent 6,084,802). In addition, the Examiner indicated that claims 4 and 5 include allowable subject matter and would be allowable if written in independent form including all the limitations of the base claim and any intervening claim.

Applicant thanks the Examiner for withdrawing the objections to the drawings and specification, and for withdrawing the Section 112 rejections. Applicant also thanks the Examiner for indicating the aforementioned allowable subject matter. By this Amendment, Applicant has amended claim 3 in response to the objection to claim 3. Claims 1-16 remain pending in this Application.

#### Objection to Claim 3

Applicant has amended claim 3 in accordance with the Examiner's suggestion. Accordingly, Applicant requests that the objection to claim 3 be withdrawn.

#### 35 U.S.C. § 103 rejection of claims 1 and 6-14

Applicant respectfully traverses the rejection of claims 1 and 6-14 as being over Applicant's DRA in view of Lee. No *prima facie* case of obviousness has been established for at least the reason that the combination of the Applicant's DRA and Lee fails to disclose or suggest each and every claim element.

For example, claim 1 includes a combination of elements including, *inter alia*, “a data fetching control circuit that is configured to generate: . . . a second pipeline control signal, in response to both a second clock signal for generating the second pipeline control signal and the first pipeline control signal.” The combination of Applicant’s DRA and Lee fails to disclose and suggest at least these claim elements. In the Office Action, the Examiner maintained that though Applicant’s DRA does not disclose the above-mentioned claim elements, Lee discloses a data fetching control circuit which generates a second pipeline control signal, in response to both a second clock signal for generating the second pipeline control signal and the first pipeline control signal. See Office Action, page 4 (citing Lee, col. 3, lines 34-37 and Fig. 3, elements 56, p2, and p3.)

Specifically, the Examiner maintained that “signal p3 in Lee is **both** a control signal **and** a clock signal.” See Office Action, page 5. Therefore, the Examiner further maintained that “p3 is analogous to **both** a “second clock signal” and “a first pipeline control signal.” See id. Applicant respectfully submits that such an interpretation of claim 1 by the Examiner is clearly in error and not in accordance with the M.P.E.P because this is an unreasonable interpretation of the claim elements of claim 1.

In particular, § 2111 of the M.P.E.P. states:

During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” (Emphasis added.)  
M.P.E.P. § 2111 8<sup>th</sup>ed. Rev. 5

Furthermore, the M.P.E.P also states:

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. Id.

As mentioned above, claim 1 includes a combination of elements including, *inter alia*, “a data fetching control circuit that is configured to generate: . . . a second pipeline control signal, in response to both a second clock signal for generating the second pipeline control signal and the first pipeline control signal.” (Emphasis

added.) Thus, claim 1 indicates the presence of two **separate** signals, i.e., a "second clock signal" and the "first pipeline control signal". Indeed, such an express limitation in the claim finds support in the Specification. For example, FIGs 5 and 6 provide a basis for this interpretation of claim 1. By analogizing signal p3 of Lee to **both** a "second clock signal" **and** a "first pipeline control signal" the Examiner has vitiated the plain meaning of the claim elements "second clock signal" and "first pipeline control signal". This is not in accordance with the M.P.E.P.

Thus, for at least the reason that the combination of Applicant's DRA and Lee fails to disclose and suggest each and every claim element, the Section 103(a) rejection of claim 1 should be withdrawn. Furthermore, there is no motivation to combine the portions of Lee cited by the Examiner (which Applicants submits does not disclose or suggest elements of claim 1) with Applicant's DRA.

In the Office Action, the Examiner maintained that "the Examiner has relied **only** upon the teaching of generating pipeline control signals in the manner disclosed by the pipeline control signal generation circuit in Fig. 3 [of Lee] [and] the Examiner has not relied upon the three stage pipeline circuit disclosed in FIG. 4 of Lee." (Original Emphasis maintained.) See Office Action, page 13 at paragraph 25.

Applicant respectfully submits that this is contrary to the teachings of the M.P.E.P. To this end, Applicant would like to draw the Examiner's attention to § 2141.02-VI of the M.P.E.P which states:

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. M.P.E.P. § 2141.02-VI 8<sup>th</sup>ed. Rev. 5

Lee discloses a pipeline control signal generation circuit 28 that is connected to a pipeline circuit 30. See Lee, FIG.1. Furthermore, FIG.3 of Lee discloses a block diagram of the pipeline control signal generation circuit 28 of FIG. 1. See Lee, col.3, lines 15-20. In addition, FIG. 4 of Lee discloses a pipeline circuit 30 of FIG. 1. See Lee, col.3, lines 50-55. Thus, interpreting FIG.3 in light of FIG. 4, one would appreciate that signal p3 in Lee cannot be analogized to a "first pipeline control signal" of claim 1. This is because, as shown in FIG. 4, signal p3 is not used to latch data in a first pipeline stage from which the second pipeline stage (controlled by

signal p2) receives data, as required by claim 1. Instead, as shown in FIG. 4, signal p3 is used to control a **third** pipeline stage 64 that receives data latched by the second pipeline stage 62. In order to combine Lee with Applicant's DRA, one would have to completely reconfigure the circuit in Lee so as to feed data from pipeline stage 64 to pipeline stage 62, which, is not taught by Lee. Furthermore, no portion of Lee suggests or discloses any advantages of the control signal generation circuit 28 in Fig. 3 separate from the pipeline circuit 30 of FIG. 4. Therefore, there would be no motivation to combine the control signal generation circuit 28 of Lee when read in conjunction with the pipeline circuit 30 of Lee with the Applicant's DRA.

Thus, for at least the reasons discussed above, the Section 103(a) rejection of claim 1 should be withdrawn. Independent claim 6, although different in scope, includes elements similar to those of claim 1 and, therefore, is allowable for at least the reasons discussed above.

Dependent claims 7 and 8 depend from claim 6 and, therefore, are allowable for at least the reasons discussed above, and in view of their additional recitations of novelty.

The Section 103(a) rejection of claim 9 should also be withdrawn for at least the reason that the combination of Applicant's DRA and Lee fails to disclose or suggest every claim element. For example, claim 9 includes a combination of elements including, *inter alia*, "a second pipeline stage coupled to the output of the first pipeline stage, wherein the second pipeline stage is driven by the first control signal and a second control signal." The combination of Applicant's DRA and Lee fails to disclose at least these claim elements.

In the Office Action, the Examiner maintained that Lee discloses a second control signal driven by a first control signal. See Office Action, page 8 (citing Lee, col. 3, lines 34-37; FIG. 3, elements 56, p2, and p3.) However, a second control signal driven by a first control signal does not constitute "a second pipeline stage coupled to the output of the first pipeline stage, wherein the second pipeline stage is driven by the first control signal and a second control signal," as required by claim 9. The Examiner has not clearly indicated what constitutes the "second pipeline stage" in Lee. Assuming, *arguendo*, that the Examiner meant that the logic and delay circuit 56 of Lee is analogous to a "second pipeline stage," Applicant submits that

circuit 56 is not driven by both, signals p3 and p2. Instead, apparently, circuit 56 is driven by signal p3 to output signal p2. See Lee, FIG. 3.

Thus, because the combination of Applicant's DRA and Lee fails to disclose each and every claim element, the Section 103(a) rejection of claim 9 should be withdrawn. Claims 10-14 ultimately depend from claim 9 and, therefore, are allowable for at least the reasons discussed above and in view of their additional recitations of novelty.

35 U.S.C. § 103 rejection of claims 2-3 and 15

Applicant respectfully traverses the rejection of claims 2-3 and 15 under 35 U.S.C. 103(a) as being obvious over Applicant's DRA in view of Lee as applied to claims 1 and 9 and further in view of Paul. Claims 2-3 and 15 ultimately depend on one of claims 1 and 9 and also include additional recitations of novelty. Furthermore, Paul, relied on for its alleged disclosure of a multiplexer (see Office Action, page 10 at paragraph 19) fails to remedy the deficiency of Applicant's DRA and Lee as discussed above in the traversal of the rejections of claims 1 and 9. Therefore, for at least the reasons discussed above, the Section 103(a) rejection of claims 2-3 and 15 should be withdrawn.

35 U.S.C. § 103 rejection of claim 16


Applicant respectfully traverses the rejection of claim 16 under 35 U.S.C. 103(a) as being obvious over Applicant's DRA in view of Lee and further in view of Shinozaki. Claim 16 depends from claim 9 and includes additional recitations of novelty. Furthermore, Shinozaki, relied on for its alleged disclosure of a second control signal utilizing a NAND gate (see Office Action, page 12) fails to remedy the deficiency of Applicant's DRA and Lee as discussed above in the traversal of the rejection of claim 9. For at least these reasons, the Section 103(a) rejection of claim 16 should be withdrawn.

Conclusion

No other issues remaining, reconsideration and favorable action upon claims 1-16 in the application are requested.

Respectfully submitted,

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